

## Patent Claims

1. Plastic molded body which comprises irregularly sintered plastic granulate particles having a density of 0.6 to 1.2 g/cm<sup>3</sup> and which has a bulk density (DIN-ISO 60) of 150 to 250 g/l.
2. Plastic molded body according to claim 1, wherein the bulk density is in the range from 150 to 200 g/l.
3. Plastic molded body according to claim 1 or 2, wherein the plastic granulate particles are of polyethylene or polypropylene.
4. Plastic molded body according to one or more of claims 1 to 3, wherein the plastic granulate particles are lenticular.
5. A method for producing the plastic molded body as defined in one or more of claims 1 to 4, comprising the steps of:
  - (a) filling at least two layers of plastic granulate particles into a mold,
  - (b) heating the plastic granulate particles to a temperature, at which the plastic granulate particles merely start melting at the surface, but do not melt through completely,
  - (c) cooling to room temperature and
  - (d) demolding the sintered plastic molded body from the mold.
6. The method according to claim 4, wherein the cooling in step (d) is a quenching.
7. The use of plastic molded bodies as defined in one or more of claims 1 to 4 as a pre-filter material in the form of a bed.
8. Bed of the plastic molded bodies as defined in one or more of claims 1 to 4.